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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/726,522

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Kou Yamamoto

XA-10008

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7590

09/14/2006

MILES & STOCKBRIDGE PC
1751 PINNACLE DRIVE
SUITE 500
MCLEAN, VA 22102-3833

EXAMINER

BROWN, DREW J

ART UNIT

PAPER NUMBER

3616

DATE MAILED: 09/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/726,522	Applicant(s) YAMAMOTO ET AL.	
	Examiner Drew J. Brown	Art Unit 3616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 6/12/06 (amendment).
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6 and 7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6 and 7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>6/21/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office Action is in response to the amendment filed on 6/12/06. Claims 1-4 have been amended, claim 5 has been canceled, and new claims 6 and 7 have been added.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Ikeda et al. (U.S. Pat. No. 6,467,807 B2).

With respect to claim 1, Ikeda et al. discloses a steering column apparatus comprising a steering shaft (1) having a rear end to which a steering wheel (column 3, line 59) is secured. A steering column rotatably supports the steering shaft and the length is adjustable in the axial directions thereof together with the steering shaft. A telescopic position fixing mechanism (Figure 3) is operable to fix the steering column to a desired length, wherein the steering column includes an outer column (4) fixed on a vehicle body side and an inner column (3) telescopically fitted in the outer column (Figure 3). The telescopic position fixing mechanism includes a lock housing (6) disposed on the outer column (Figure 3), first (12b) and second (12a) press blocks, each slidably held within a bore of the lock housing, a bolt (13) passing through the first and second press blocks, where the first and second press blocks have the bolt non-threadably received therein so as to be slidable on the bolt and movable toward and away from each other to press and release the inner column so as to fix and release the telescopic position of the steering column (Figure 3). A press block driving mechanism is operable to move the first and second press blocks toward and away from each other, where the press block driving mechanism includes a first cam (18) provided on the second press block and a rotatable cam (17) facing the first cam, where a lever (16) rotates the rotatable cam, and an interval regulating member, having a first interval regulating member (15) and a second interval regulating member (head of bolt

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13), regulate an interval between the rotatable cam and the first press block (column 4, lines 55-67 and column 5, lines 1-2).

With respect to claim 3, Ikeda et al. discloses that the fixed cam is made integral with the second press block. When manufacturing and assembling the cam lock mechanism, the fixed cam is connected to the second press block and then fastened to it via a protrusion (18a) so the fixed cam is incapable of rotation (column 4, lines 66-67 and column 5, lines 1-2).

3. Claims 1 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Matsumoto (JP 2002-166835).

With respect to claim 1, Matsumoto discloses a steering column apparatus comprising a steering shaft having a rear end to which a steering wheel (inherent) is secured. A steering column rotatably supports the steering shaft and the length is adjustable in the axial directions thereof together with the steering shaft. A telescopic position fixing mechanism (Figure 2) is operable to fix the steering column to a desired length, wherein the steering column includes an outer column (2) fixed on a vehicle body side and an inner column (1) telescopically fitted in the outer column (Figure 2). The telescopic position fixing mechanism includes a lock housing (8) disposed on the outer column (Figure 2), first (11a) and second (11b) press blocks, each slidably held within a bore of the lock housing, a bolt (14) passing through the first and second press blocks, where the first and second press blocks have the bolt non-threadably received therein so as to be slidable on the bolt and movable toward and away from each other to press and release the inner column so as to fix and release the telescopic position of the steering column (Figure 2). A press block driving mechanism is operable to move the first and second press blocks toward and away from each other, where the press block driving mechanism includes a first cam (18) provided on the second press block and a rotatable cam (17) facing the first cam, where a lever (15) rotates the rotatable cam, and an interval regulating member, having a first interval regulating member (nut on bolt 14) and a second interval regulating member (head of bolt 14), regulate an interval between the rotatable cam and the first press block.

With respect to claim 4, Matsumoto discloses that the press block driving mechanism further includes an inclined guide member (9a, 9b), formed in the lock housing, to facilitate movement of at least one of the first and second press blocks away from the other (Figure 2).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2, 6, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ikeda et al. in view of JP 2588338.

Ikeda et al. discloses the claimed invention as discussed above but does not disclose that the press block driving mechanism includes a biasing device which biases the first press block and second press block away from each other.

However, Figure 4 of JP 2588338 does disclose a biasing device (39) for biasing the first press block and second press block away from each other.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Ikeda et al. in view of the teachings of Figure 4 of JP 2588338 to have a biasing device between the first and second press blocks in order to further control the force needed to clamp and unclamp the telescopic position fixing means.

Ikeda et al. also discloses that the first and second regulating members are provided at respective end portions of the bolt so as to regulate movements, along the axis of the bolt, of the first and second press blocks to a predetermined interval. The first regulating member is in communication with the first press block (Figure 3) to regulate movement thereof along the bolt axis, a distance adjusting mechanism (17 and 18) is provided between the second regulating member and the second press block for changing a distance therebetween, and an operating lever (16) operates the distance between the second regulating member and the second press block. The distance adjusting mechanism includes a first cam (18) fixedly provided on the second press block and fitted slidably on the bolt, and a rotatable cam (17) is disposed between first cam and the second regulating member to face the first cam. The distance adjusting mechanism is

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operated to make the distance between the second regulating member and the second press block larger, the first and second press blocks are moved toward each other so as to press the outer surface of the inner column, and when the distance adjusting mechanism is operated to make the distance between the second regulating member and the second press block smaller, the first and second press blocks are moved away from each other so as to release the pressure on the inner column (column 4, lines 55-67 and column 5, lines 1-2). Ikeda et al., however, does not disclose that the first regulating member is in direct contact with the first press block.

JP 2588338 does disclose that the first regulating member (36) is in direct contact with the first press block (25, Figure 2).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Ikeda et al. in view of the teachings of JP 2588338 to have the first regulating member in direct contact with the first press block in order to ensure a secure clamping force while also minimizing the number of parts needed.

6. Claims 2, 6, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto in view of JP 2588338.

Matsumoto discloses the claimed invention as discussed above and also discloses that the first and second regulating members are provided at respective end portions of the bolt so as to regulate movements, along the axis of the bolt, of the first and second press blocks to a predetermined interval. The first regulating member is in direct contact with the first press block (Figure 2) to regulate movement thereof along the bolt axis, a distance adjusting mechanism (17 and 18) is provided between the second regulating member and the second press block for changing a distance therebetween, and an operating lever (15) operates the distance between the second regulating member and the second press block. The distance adjusting mechanism includes a first cam (18) fixedly provided on the second press block and fitted slidably on the bolt, and a rotatable cam (17) is disposed between first cam and the second regulating member to face the first cam. The distance adjusting mechanism is operated to make the distance between the second regulating member and the second press block larger, the first and second press blocks are moved toward each other so as to press the outer surface of the inner column, and when the distance adjusting mechanism is operated to make the distance between the second

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regulating member and the second press block smaller, the first and second press blocks are moved away from each other so as to release the pressure on the inner column.

Matsumoto does not disclose that the press block driving mechanism includes a biasing device which biases the first press block and second press block away from each other.

However, Figure 4 of JP 2588338 does disclose a biasing device (39) for biasing the first press block and second press block away from each other.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Matsumoto in view of the teachings of Figure 4 of JP 2588338 to have a biasing device between the first and second press blocks in order to further control the force needed to clamp and unclamp the telescopic position fixing means.

Response to Arguments

7. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Drew J. Brown whose telephone number is 571-272-1362. The examiner can normally be reached on Monday-Thursday from 8 a.m. to 4 p.m..


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul N. Dickson can be reached on 571-272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Drew J. Brown
Examiner
Art Unit 3616

db
9/12/06

 9/12/06
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